

Leek
District

Urban
Council.



JOINT REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND

SANITARY INSPECTOR

ON THE

Sanitary Condition of Leek,

FOR THE YEAR 1895.

LEEK

CHARLES KIRKHAM, PRINTER, STATIONER, &c., DERBY STREET.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE LEEEK URBAN SANITARY DISTRICT.

The mortality within the Urban Sanitary District of Leek during 1895 has been greater by 45 than in the previous year, the deaths numbering 295, comprising 158 males and 137 females.

These deaths show a rate of mortality, according to our present population, of 20 to each 1000 of the living, but as they include 13 persons brought to Public Institutions from other districts, the death-rate of the Leek Urban District proper is 19·1 to each 1000 of the living.

The mean age at death of these 295 persons is 33·9 in the case of males, and 36·5 in that of females, averaging for each deceased individual 34·8 years.

The Births registered during the year were 447—226 males and 221 females, and show a birth-rate of 30·3 to each 1000 of the living.

The infantile death-rate, as measured by the number of deaths under 1 year of these 447 births, is the heaviest that has been recorded for many years, and without doubt the remarks of the Inspector relative to this matter is well deserving the attention of mothers. The proportion is 18·2 to 1000 living.

The deaths occurred at the following ages:—

Under 1 year	..	..	81
Between 1 and 5 years	..	..	25
" 5 "	15 "	..	10
" 15 "	25 "	..	14
" 25 "	65 "	..	87
Over 65 "	..	..	78

The deaths from *Zymotic* diseases were, as to numbers precisely similar to those of 1894, but differing greatly in character, for while 5 deaths resulted from Scarlet Fever then, no death has occurred from this disease in 1895, notwithstanding the fact that 42 notifications of its presence were received, and I attribute this death immunity largely to the immediate removal of 35 of the 42 to the Isolation Hospital.

Of the 17 cases of Enteric Fever notified, 12 were taken to the Hospital. Of these 2 died—1 the day after admission from Pulmonary Congestion—the other at the end of a fortnight from Cardiac failure. These cases were all isolated ones in the most divers parts of the town, no epidemic of the disease was ever perceived, and all efforts to trace their source proved unavailing.

The case of death recorded from Diphtheria was of doubtful character, and the other 2 cases notified as such recovered so rapidly with no after mischievous consequences, that in these also an element of suspicion is permissible.

In the last quarter of the year we had rather a sharp epidemic of Measles, but only 3 deaths occurred, and these in very young and weakly children. Several cases of Whooping Cough were observed during the same period, but the epidemic was comparatively mild and only 1 death resulted.

Under the head of *Constitutional* Diseases the chief point to be noted is the increase of deaths from Phthisis as compared with last year. This I conceive to be owing to some extent to the lowered standard of general health arising from the circumstances I shall presently refer to.

In the class of *Local* Diseases it is singular that the deaths from disorders of Respiration and Circulation are precisely the same as last year, but those arising from the maladies connected with the Brain and Nervous System and Organs of Digestion have materially increased.

Looking at the general aspect of the mortality tables for 1895, one cannot but feel that the exceptional commercial condition of our town in the earlier portion of the year had a good deal to do with the increased death-rate. The very

severe atmospheric influences then prevalent prevented outdoor labour being followed for many weeks, and the shortened time of workers in the staple trade resulted in a largely diminished income, and consequent inability to provide a sufficiency of materials for physical well-being.

There were 30 cases of Premature Birth and Debility from birth—a fact showing a great want of vital stamina; and the deaths from disease of the Digestive Organs were double the average of similar diseases for the last 6 years—many of these cases being children improperly fed, and therefore not nourished.

The great and lamentable feature of the mortality records for 1895 is the very large percentage of infantile deaths. Out of the 81 deaths under 1 year, 41 had not reached 3 months of life and 15 others were under 6 months, while we had notice of 33 cases of so-called still-born children—a number much above the average. All this points to a lowered vital power, and although I admit the condition of things I have already noticed may be responsible for much of this, I fear there is a more important factor still.

That the practice of women taking alcoholic beverages has increased of late years, and is still growing, is a universally acknowledged fact, and while this is the case it is hopeless to expect the birth of healthy progeny. Hereditary degeneracy is produced by these drinks, and this is often capped by the mother's blood being saturated with alcohol from the first moment of the child's existence until it leaves the breast. I have known a medical man say that a large proportion of children are never sober from the time of birth till they are weaned ; and my own deliberate conviction is that nothing but harm comes to nursing mothers, and the infants depending upon them, by the ordinary use of alcoholic beverages of any kind. Women, during the period of gestation, when every trifling accident may have, and when the food and exercise undoubtedly do have, an influence on the unborn, take wine and beer freely, and the children born of such parents die much more frequently than other children of Convulsions and Diarrhoea while cutting their teeth, and are very liable to tubercular inflammation of the membranes of the Brain. That these are absolute truths every day's experience of observing medical men proves most clearly

The statement, often, alas, too true, that the insurance of young children's lives tends to the larger mortality of infants, is not proved by Leek experience, for the deaths in the Leek Benevolent Burial Society of infants under 1 year was very much below the average of the town generally, showing that the evil does not lie among the more provident and industrious members of the population. The proportions are,

Leek 181·2 in 1000.

Burial Society 130·6 in 1000.

During the year, in conjunction with the Inspector, I have made frequent visits to all parts of the district, and my daily professional work brings me constantly in contact with matters affecting the Sanitary well-being of the people. For the setting forth of the details of this work I refer to the admirable report of the Inspector, whose energy and untiring perseverance is worthy of all praise, and to whom unquestionably the satisfactory hygienic position of the district is mainly due.

I have reported monthly to the Council on various questions relating to the health of the district, but no special reports have been required. There is one matter, however, well deserving their attention—viz., the establishment of suitable Common Lodging Houses. Those at present in existence are by no means ideal, but as the occupiers attend closely to the Bye Laws regulating such places, and give no reason for complaint, they cannot in my opinion be wisely refused a License, until buildings more in harmony with present-day views are provided; as without such accommodation tramps would be housed at private dwellings where no supervision could be exercised or information afforded, greatly to the detriment of public health.

With our present outward sanitary appliances, such as an abundant and constant supply of excellent water, a good system of drainage, a regular method of scavenging, frequent inspections and immediate abatement of nuisances complained of, we ought to be in better health as a town than we are, but as an old writer, more than 200 years ago, after giving true pictures of the opposite conditions of health and disease, said: "What stronger inducements can anyone require to give him an interest in the study and observations of nature's

institutions, seeing that they are the only means by which the beloved ends and wished-for enjoyments can be attained, and that we may as likely keep or acquire riches by prodigality, as preserve health and long life by intemperance, inordinate passions, a noxious air, and such like injurious customs ways and manner of living "

I append the usual tables of Causes of Death and Ages at Death, and the Inspector's report

J J. RITCHIE,

Medical Officer of Health

CAUSES OF DEATH IN 1895.

		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Zymotic Diseases.	Influenza	2												2
	Typhoid Fever.....								I	I	I	I		4
	Diphtheria								I					1
	Measles								2		I			3
	Whooping Cough								I					1
	Puerperal Erysipelas								I					1
Constitutional Diseases.	Phthisis	I	I	I	I	I	5	I	I	5	I	5		23
	Tubercular Diseases ..	I	I	2	I				2	I		I		9
	Cancer	I	2	I	2	I	I		I	I		I		11
	Alcoholism	I	I					I			I			4
	Rheumatism		I			I		I						3
	Syphilis			I										1
	Sarcoma						2							2
	Mortification								I		I			2
Local Diseases.	Diseases of Brain, &c...	I	9	4	3	3	2	I	2	3	2	I		31
	" Respiration	6	6	9	7	4	6	..	3	2	7	4	6	60
	" Circulation	4	4	3	2	..	2	2	3	2	3	1		26
	" Digestion ..	2	2	I	I	I	2	2	5	3	9	3		31
	" Urination ..	2	I	..	I	..	I	..	I	..	3	..		9
	" Skin									I				1
Developmental Diseases.	Debility, &c.....	3	I	I	..	3	I	..	I	2	3	..	2	17
	Old Age	I	4	2	3	2	I	..	4	5	4	I	4	31
	Teething		I											1
	Premature Birth			2	2	I	..	I	2	..	2	I	2	13
	Sudden or Violent	2				I	2	..	I	..	I	I		8
	Total.....	24	33	29	24	14	19	12	28	23	43	20	26	295

AGES AT DEATH.

	0—1	1—2	2—3	3—4	4—5	Total under 5	5—10	10—15	15—25	25—35	35—45	45—55	55—65	65—75	75—85	85—95	Total
January ..	5	...	1	..	6	1	..	1	2	2	2	3	6	..	1	24	
February ..	7	4	..	..	11	1	..	1	..	4	5	3	7	1	32		
March ..	10	..	1	..	11	..	..	2	5	1	4	5	3	..	29		
April ..	5	2	..	1	..	8	..	1	..	2	..	4	5	2	1	24	
May ..	7	..	..	..	7	..	..	3	..	1	..	1	..	2	..	14	
June ..	5	2	1	..	..	8	..	1	..	1	3	1	5	..	19		
July ..	2	..	..	..	2	..	1	1	4	..	1	1	2	..	..	12	
August ..	7	2	1	..	..	10	2	..	1	3	..	1	6	2	3	..	28
September ..	8	1	1	..	..	10	..	..	1	2	2	1	3	4	..	23	
October ..	15	2	1	..	..	18	2	..	2	4	2	1	3	5	4	2	43
November ..	3	2	1	..	..	6	1	..	2	2	2	1	3	2	..	1	20
December ..	7	1	..	1	..	9	1	..	2	..	1	2	2	4	5	..	26
Total	81	16	6	3	..	106	7	3	14	19	16	18	34	42	30	6	295

SANITARY INSPECTOR'S REPORT.

ACTION TAKEN FOR THE ABATEMENT OF NUISANCES, &c.

During the year ending December, 1895, the following cases of Nuisances and other matters complained of were dealt with, comprising :—

- 68 cases of defective or want of private drainage.
- 15 " slop-stone drains admitting sewer gas in house disconnected.
- 12 " defective water closets.
- 21 " offensive privies.
- 8 " accumulation of offensive matter.
- 16 " offensive cesspools filled up.
- 2 " want of drain ventilation.
- 8 " dilapidated buildings.
- 3 " houses in a filthy condition.
- 4 " nuisances arising from over-crowding.
- 1 " slaughter-house nuisance.

- 1 case of poultry kept in dwelling-houses contrary to Bye-laws
- 2 cases of tripe and offal boiling and fish frying.
- 7 " want of proper paving in private yards attached to dwelling-houses.
- 1 case of a house in such condition as to be unfit for habitation made habitable.
- 7 cases of want of privy or water closet accommodation
- 5 " want of proper receptacles for ashes.
- 3 " want of proper water supply.
- 3 " nuisance arising from dense black smoke.
- 1 case of keeping of unregistered common lodging-house
- 21 houses, including 1 school and 434 articles of infected bedding, &c., were disinfected.
- 2 cases in which pigs were removed to a distance of more than 20 yards from a dwelling-house in accordance with the requirements of the Bye-laws.

A considerable number of nuisances were abated without formal notice being given.

There are 15 notices of nuisances remaining on the books not yet complied with.

OFFENSIVE PRIVIES AND CESSPOOLS.

- 21 offensive privies were converted into water closets.
- 16 offensive ashpits were abolished.

LEGAL PROCEEDINGS.

Legal proceedings were taken in one case for offences against the Common Lodging-house Bye-laws. The fines and costs amounted to £1 1s.

REMOVAL OF ASHES AND NIGHT-SOIL.

The Scavenging Department removed 4,157 loads of house ashes and garbage, and 291 loads of night-soil.

COMMON LODGING-HOUSES.

There are 4 houses licensed under the Common Lodging-houses Acts, for the reception of 115 casual lodgers. The regulations approved by the Local Government Board for

the management of these houses have with one exception been satisfactorily observed. One case of infectious disease occurred in these houses during the year.

SLAUGHTER-HOUSES.

There are 6 licensed Slaughter-houses within the Town subject to the Bye-laws authorized by the Local Government Board.

BAKEHOUSES AND WORKSHOPS.

The Bakehouses and Workshops within the limits of the Leek Improvement Act have been inspected from time to time and any suggestion made with a view to keeping the same in a satisfactory condition has been complied with by the occupier

PETROLEUM STORES.

There is one license in force within the Town for the keeping or sale of Petroleum or other substances of a like nature.

GAS SUPPLY.

The purity of the Gas supplied to the Town was tested from time to time in the manner required by the 34th and 35th Vict., cap. 41. Impurity arising from the presence of sulphuretted hydrogen was shewn by the tests on 2 days during the year 1895.

NOTIFICATION OF INFECTIOUS DISEASE.

During the year ending 1895, 64 cases of infectious disease, consisting of 42 cases of scarlet fever; 3 diphtheria, 17 of enteric fever; and 2 from other causes were reported in the form set forth in the schedule provided in that behalf, and the necessary steps promptly taken to prevent the spread of the disease. 48 of these cases were removed to the hospital, and the remainder treated at their homes. Notwithstanding the efforts of the department, it has been found exceedingly difficult in many cases to secure satisfactory isolation of cases of scarlet fever at home. Thoughtless persons attending upon the patient mixing with others without taking proper precautions, and receiving visitors into the infected house have been the means of spreading the infection to a large extent. In other instances cases have been of so mild a

character that it was not thought necessary to call in the doctor, and the case has gone unrecognised, the children being allowed to mix with others, and spread the infection. The source of milk supply is recorded in every case of infectious disease notified, and we have no evidence of any mischief resulting from its distribution.

ISOLATION HOSPITAL.

Year ending December, 1895.

Number of patients in Hospital, Jan. 1st, 1895	..	..	12
Do. do. admitted during the year	..	..	48
Do. do. discharged do.	..	..	58
Do. do. died do.	..	..	2
Do. do. in Hospital, Dec. 31st, 1895	..	..	0

The average duration in Hospital of each Patient was 31·23 days.

The rate of mortality amongst the Patients treated in Hospital was only 3·33 per cent.

INTERMENTS WITHIN THE TOWN.

During the year ending December, 1895, 2 interments took place in the Burial Ground attached to St. Edward's Church, and 3 in the Ground attached to Mount Pleasant Wesleyan Chapel. The provisions of the Orders in Council relating thereto were duly observed.

TABLE I.—ABSTRACT OF THE CENSUS RETURNS OF 1851, 1861, 1871, 1881 AND 1891, WITHIN THE LIMITS OF THE LEEK IMPROVEMENT ACT.

Census Year	Area in Statute Acres	HOUSES.			PERSONS.		
		In-habited	Uninhabited	Build-ing	Males	Fe-males	TOTAL
1851	1460	1791	39	22	4315	4781	9066
1861	1460	2228	101	27	4686	5488	10174
1871	1460	2386	88	2	5087	6244	11331
1881	1460	2726	136	18	5874	6991	12865
1891	1460	3022	169	24	6420	7708	14128

TABLE 2.—POPULATION, BIRTHS AND DEATHS

Table shewing the mean Population, the number of Births and Deaths, and the average annual number of Births and Deaths to 1000 persons living, and the mean Age at Death of males, females and persons within the limits of the Leek Improvement Act, during various periods of the 45 years ending 1895.—(W. H. H.)

Periods.	Mean Population	Total number of		Average Annual Number of Births and Deaths to 1000 living.		Mean Age at Death.		
		Births	Deaths	Births	Deaths	Males	Females	Persons
						Years.	Years.	Years.
To years 1851-60	9635	3440	2819	35.7	29.3	23.5	25.9	24.8
To years 1861-70	10752	3516	2540	32.7	23.6	29.1	34.7	32.0
To years 1871-80	12098	4167	2734	34.4	22.6	30.8	32.3	31.5
To years 1881-90	13496	4146	2668	30.1	19.8	32.7	35.9	34.3
Year 1891	14154	406	2574	28.7	18.2	36.9	38.6	37.8
" 1892	14289	417	322b	29.1	22.5	33.9	38.7	36.7
" 1893	14406	425	292c	29.5	20.2	36.9	39.8	38.6
" 1894	14573	429	250d	29.4	17.1	33.0	36.8	34.9
" 1895	14746	447	295e	30.3	20.0	33.9	36.5	34.8

^a This number includes 9 persons brought to Public Institutions from other Districts.

^b This number includes 4 brought to Public Institutions from other Districts. ^c This number includes 10 brought to Public Institutions from other Districts. ^d This number includes 11 brought to Public Institutions from other Districts. ^e This number includes 13 persons brought to Public Institutions from other Districts.

Of the 13 Deaths of persons brought from other Districts to Public Institution within the Town, 6 were from Leek Rural District; 3 from the Biddulph Urban District; 1 from the Smallthorne Urban District; 1 from the Cheadle Rural District; and 2 were tramps.

Excluding the 13 deaths in Public Institutions in the Town of persons brought there from other Districts, the corrected annual rate of mortality in the Urban District of Leek for the year ending December, 1895, is 19·1 to 1000 living. Provided the vital experience of the Urban District during the year 1895 were continued, the mean duration of life of every person born would amount to 47·6 years, or 6·7 years longer life than that given for England and Wales in the "English Life Table, No. 3."

A brief review of the past vital experience of the population of Leek shows that the value of life gradually decreased from 1801 to 1860. During the ten years, 1851-60, the subject received marked attention from those gentlemen then responsible for the local government of the town, which resulted in the passing of the "Leek Improvement Act 1855." Urged by our good friend, the late Sir E. Chadwick, we commenced keeping our vital statistical record in 1851, in the compound form suggested by the late Dr. Farr, Superintendent of the Vital Statistical Department of Somerset House. For various sanitary purposes this record has afforded valuable information.

A Life Table based upon the vital experience of the population of Leek (including Public Institutions) for the ten years ending 1860, gives a mean duration of life to each person born of 29·3 years; for the ten years ending 1870, 37·9 years; for the ten years ending 1880, 42·3; for the ten years ending 1890, 46·5 years; and for the five years ending 1895, 46·6 years; which shows conclusively that the various sanitary and other improvements effected, including new water supply and drainage, school hygiene and elementary education and careful observance of Factory and Workshop regulations, combined to make physical growth more perfect, decay less rapid, life more vigorous, and death more remote. It is also worthy of note that the total Urban District rate has never exceeded 2s. 4d. in the £.

TABLE 3.—INFANT MORTALITY.

Table showing the number of Births; the number of Deaths under the age of 1 year; and the rate of mortality to 1000 births, within the limits of the Leek Improvement Act, during various periods of the 45 years ending 1895.

Periods.	Number of		Rate of Mor- tality to 1000.
	Births	Deaths under 1 year	
10 years 1851-60	3440	646	187·8
10 years 1861-70	3516	573	162·9
10 years 1871-80	4167	670	160·7
10 years 1881-90	4146	585	141·1
Year 1891	406	51	125·6
" 1892	417	65	155·8
" 1893	425	59	138·8
" 1894	429	71	166·3
" 1895	447	81	181·2

There is no doubt but that the objectionable system of the employment of mothers of infants from their homes is, to a large extent, responsible for the loss of infant life.

TABLE 4.

Percentage of Illegitimate Births in Leek during each of the under-mentioned periods of the 45 years ending 1895

Periods of Years.	Percentage of Illegitimate Births.
10 years 1851-60	9·7
10 years 1861-70	8·8
10 years 1871-80	8·5
10 years 1881-90	6·8
Year 1891	5·2
" 1892	4·8
" 1893	6·8
" 1894	6·3
" 1895	5·6

HOUSING OF THE WORKING CLASSES' ACT, 1890.

During the year the action taken under the provisions of the above-mentioned Act, resulted in one dwelling-house unfit for human habitation being closed,

CANAL BOAT ACTS, 1877 AND 1884.

During the year ending December, 1895, I inspected 35 Canal Boats within the Urban Sanitary District of Leek. With two exceptions, the condition of the Boats and their occupants, as regards the several matters dealt with in the Acts and Regulations, was satisfactory. No proceedings were taken further than cautioning the persons concerned.

DAIRIES, COW-SHEDS & MILK-SHOPS ORDERS, 1885-6.

There are 40 persons registered pursuant to the above-mentioned Orders within the Urban Sanitary District of Leek. The Regulations of the Local Authority made in that behalf which came into force on the 1st day of August, 1891, are being enforced. There are 215 milch cows kept within the district.

SANITARY CONDITION OF SCHOOLS.

During the year considerable sums have been expended by managers of Elementary Schools in increasing the accommodation, and materially improving their Sanitary condition. Similar action is under consideration with regard to other Schools within the town, especially in those cases where a system of proper ventilation is urgently needed.

R. FARROW,
Sanitary Inspector.

